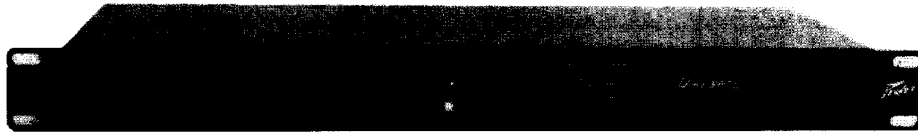


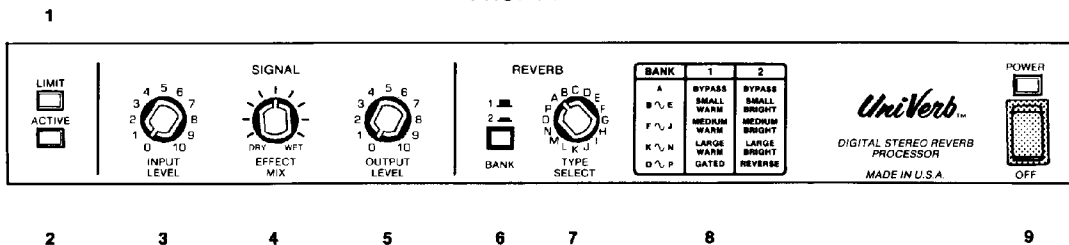


# UniVerb™

DIGITAL STEREO REVERB  
PROCESSOR  
OPERATING GUIDE



## FRONT PANEL



### LIMIT LED (1)

Illuminates to indicate that the effect computation is within 6 dB of limiting. Adjust the source signal and the Input Level control to allow illumination of this LED only on program peaks. Continuous illumination means there is risk of distortion and/or reduced signal processing performance.

### ACTIVE LED (2)

Provides an indication of the minimum signal level necessary for operation of the processor. The LED illuminates approximately 20 dB below the onset of clipping, and should illuminate frequently during a performance.

### INPUT LEVEL CONTROL (3)

Adjusts the input sensitivity for optimum matching with the input signal. The control should be adjusted to a level that allows the Limit LED to light occasionally on program peaks. Failure to adjust the Input Level control correctly may cause increased distortion and degrade the signal-to-noise performance of the unit.

**EFFECT MIX (4)**

Sets the mix ratio for the Effect/Dry signals at the outputs. Range is from dry, unprocessed signal only (full counterclockwise position), to wet, effect only signal (full clockwise position.) The 12 o'clock position yields a 1:1 mix ratio.

Note that an audible drop in signal level may occur at the 1:1 mix ratio position (12 o'clock control position) due to cancellation of certain frequencies corresponding to 180° phase shifts.

**OUTPUT LEVEL (5)**

Adjusts the overall signal level available at the Left and Right outputs.

**BANK SELECT SWITCH (6)**

Allows selection of the effects in Bank 1 or Bank 2. The effects available in each bank are designated in the table below.

**TYPE SELECT DIAL (7)**

Allows selection of any of the 16 effects in Bank 1 and the 16 effects in Bank 2. The A position in both banks is bypass. The effects available in each bank are designated in the table below.

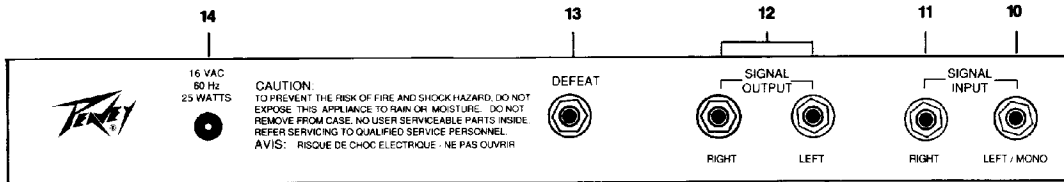
(8)

BANK	1	2
A	Bypass	Bypass
B thru E	Small, warm room reverb effects	Small, bright room reverb effects
F thru J	Medium, warm room reverb effects	Medium, bright room reverb effects
K thru N	Large, warm hall reverb effects	Large, bright hall reverb effects
O thru P	Gated reverb effects	Reverse reverb effects

**POWER SWITCH (9)**

Depress the switch to the "On" position. The red pilot light (LED) will illuminate indicating power is being supplied to the unit.

## BACK PANEL



### STEREO IN/STEREO OUT OPERATION

Stereo input signals at the Left and Right inputs are processed to generate stereo reverb images. The resultant left and right reverberant signals are then re-mixed with the original Left and Right input signals. Continuity and "imaging" of the original stereo program is maintained. The mix ratio of reverb-to-dry is adjusted via the Effect Mix control.

### MONO IN/STEREO OUT OPERATION

Mono signal sources should be connected to the Left/Mono input. Mono signals here are processed to generate "left" and "right" reverb images. Left reverberant signal is then re-mixed with the mono input signal for the Right output. Likewise, right reverberant signal is re-mixed with the mono input signal for the Right output. In this manner, a stereo reverb effect is processed from a mono source. The mix ratio of reverb-to-dry is adjusted via the Effect Mix control.

For mono output operation, either of the two outputs may be used with equally realistic Mono reverb performance.

### LEFT/MONO INPUT (10)

Use this input for processing mono sources or the "Left" program material from stereo sources. Mono sources input here are processed into "stereo" at the Left and Right outputs.

### RIGHT INPUT (11)

Use this input for processing "Right" program material from stereo sources.

### SIGNAL OUTPUT (RIGHT & LEFT) (12)

Right and Left outputs are provided for stereo effects. For mono operation, either output may be used.

### DEFEAT SWITCH JACK (13)

Provided for connection of an optional footswitch for remote defeat (bypass) of the effect. With the Effect Mix control set fully to "wet", the bypass mode yields a no-output condition.

### POWER SUPPLY SOCKET (14)

Provided for connection of the external power supply. Insert the power supply plug fully into the socket before making the AC outlet connection.

### CAUTION

Use only the power supply provided with this product. If the original power supply must be replaced, consult your dealer or the factory for assistance in obtaining the correct replacement.

Failure to use the correct power supply could result in fire or shock hazard, circuit damage, decreased performance, or non-operation.

## UNIVERB SPECIFICATIONS

**REVERBERATION SETTINGS:**

- 32 Reverb Positions:
- 2 Bypass Settings
- 13 Warm Reverbs
- 13 Bright Reverbs
- 2 Gated Reverbs
- 2 Reverse Reverbs

**FREQUENCY RESPONSE:**

- Dry Signal: 20 Hz to 20 kHz
- Effect Signal: 20 Hz to 11 kHz

**QUANTIZATION:**

- 16-Bit Linear PCM

**SIGNAL-TO-NOISE RATIO:**

- Dry Signal: 100 dB minimum
- Effect Signal: 96 dB minimum

**INPUTS:**

- Left/Mono: -20 dBV minimum, +10 dBV maximum
- Right: -20 dBV minimum, +10 dBV maximum

**OUTPUTS:**

- Left: +6 dBV maximum
- Right: +6 dBV maximum

**HEADROOM:**

- Active: -20 dB down from maximum
- Limit: -6 dB down from maximum

**AUXILIARY FOOTSWITCH:**

- Effect Defeat Switch

**FRONT PANEL CONTROLS:**

- Input Level Control
- Effect Mix Control
- Output Level Control
- Bank Select Switch (Push)
- Effect Select Switch (Rotary)

**REAR PANEL CONNECTORS:**

- Left/Mono Input Jack
- Right Input Jack
- Left Output Jack
- Right Output Jack
- Effect Defeat Jack
- AC Input Connector

**POWER SUPPLY REQUIREMENTS:**

- Use only Peavey 16.5 VAC Power Supply

**DANGER**

EXPOSURE TO EXTREMELY HIGH NOISE LEVELS MAY CAUSE A PERMANENT HEARING LOSS. INDIVIDUALS VARY CONSIDERABLY IN SUSCEPTIBILITY TO NOISE INDUCED HEARING LOSS, BUT NEARLY EVERYONE WILL LOSE SOME HEARING IF EXPOSED TO SUFFICIENTLY INTENSE NOISE FOR A SUFFICIENT TIME. THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HAS SPECIFIED THE FOLLOWING PERMISSIBLE NOISE LEVEL EXPOSURES

DURATION PER DAY IN HOURS	SOUND LEVEL (dBA, SLOW RESPONSE)
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
¾	110
½	115

% of noise

ACCORDING TO OSHA, ANY EXPOSURE IN EXCESS OF THE ABOVE PERMISSIBLE LIMITS COULD RESULT IN SOME HEARING LOSS.

EAR PLUGS OR PROTECTORS IN THE EAR CANALS OR OVER THE EARS MUST BE WORN WHEN OPERATING THIS AMPLIFICATION SYSTEM IN ORDER TO PREVENT A PERMANENT HEARING LOSS IF EXPOSURE IS IN EXCESS OF THE LIMITS AS SET FORTH ABOVE. TO INSURE AGAINST POTENTIALLY DANGEROUS EXPOSURE TO HIGH SOUND PRESSURE LEVELS, IT IS RECOMMENDED THAT ALL PERSONS EXPOSED TO EQUIPMENT CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS SUCH AS THIS AMPLIFICATION SYSTEM BE PROTECTED BY HEARING PROTECTORS WHILE THIS UNIT IS IN OPERATION.

THIS MIXER CONSOLE EFFECTS DEVICE HAS BEEN DESIGNED AND CONSTRUCTED TO PROVIDE ADEQUATE SIGNAL (VOL LEVEL) FOR PLAYING MODERN MUSIC. PROPER USE OF THE GAIN/BUFFER CONTROLS AND/OR IMPROPER USE OF INTERNAL/EXTERNAL MIXES MAY CREATE CLIPPING (SQUARE WAVES) AND POSSIBLY CAUSE SUBSEQUENT DAMAGE TO THE LOUDSPEAKER SYSTEMS. EXTENDED OPERATION OF THE GAIN/EQUALIZATION CONTROLS IN THEIR MAXIMUM POSITIONS IS HEREBY NOT RECOMMENDED. PLEASE BE AWARE THAT MAXIMUM POWER CAN BE OBTAINED WITH VERY LOW SETTINGS OF THE GAIN/EQUALIZATION CONTROLS IF THE INPUT SIGNAL IS VERY STRONG.

IT IS COMMON PRACTICE AMONG USERS OF SOUND REINFORCEMENT EQUIPMENT TO IDENTIFY THE INDIVIDUAL CHANNELS WITH A SERIES OF TAPE PLACED ABOVE OR BELOW THE NAME OF VOLUME FADER. MANY TYPES OR BRANDS OF TAPE HAVE A VERY STRONG ADHESIVE WHICH CAN INHIBIT THE PRINTING ON THE FADER. PLEASE BE AWARE THAT TAPE SHOULD BE REMOVED WHEN THE TAPE IS REMOVED. WE STRONGLY RECOMMEND THAT SCOTCH TAPE BE USED ON DATED SURFACES FOR ANY OTHER TAPE THAT IS NOT SPECIALLY DESIGNED FOR THESE APPLICATIONS. NEVER USE LIGHT ALUMINUM TAPE OR TAPE LABELED AS RECOMMENDED IF TAPE IS USED AND THE LEFT ON PAINTED SURFACE FOR UNDATED PERIODS WILL BE DIFFICULT TO REMOVE. NEVER USE CLEAR OR SCOTCH TAPE FOR THESE APPLICATIONS.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e. a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Meter parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia based household cleaner if necessary.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
  - A. The power supply cord or plug has been damaged.
  - B. Anything has fallen or been spilled into the unit.
  - C. The unit does not operate correctly.
  - D. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.



Due to our efforts for constant improvement, features and specifications are subject to change without notice.